Abstract

A sensor is described for determining a concentration of gas components in gas mixtures having a first measuring electrode (mixed potential electrode) which has little or no catalytic effect on the establishment of an equilibrium in the gas mixture and a second measuring electrode (equilibrium electrode) which catalyzes the establishment of an equilibrium in the gas mixture as well as a solid electrolyte that is conductive for oxygen ions arranged between the two measuring electrodes, with the two measuring electrodes being exposed to the gas mixture.

At least the first measuring electrode (16) is a cermet electrode, where at least one metal oxide component of the cermet electrode is capable of reversible incorporation of oxygen.

(Figure 1)

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